

**UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF MICHIGAN  
SOUTHERN DIVISION**

*In re* Flint Water Cases.

Judith E. Levy  
United States District Judge

\_\_\_\_\_/

This Order Relates To:

*Carthan, et al. v. Snyder et al.*  
Case No. 16-10444

\_\_\_\_\_/

**OPINION AND ORDER DENYING DEFENDANTS VEOLIA  
NORTH AMERICA, LLC, VEOLIA NORTH AMERICA, INC., AND  
VEOLIA WATER NORTH AMERICA OPERATING SERVICES,  
LLC’S MOTION TO EXCLUDE THE TESTIMONY AND REPORT  
OF DR. DAVID KEISER [2458]**

This opinion is one in a series of opinions addressing the admissibility of the testimony and reports of nine experts retained by Plaintiffs<sup>1</sup> in anticipation of the issues class trial, set to begin on

---

<sup>1</sup> See ECF No. 2454 (VNA’s motion to exclude opinions and testimony of Dr. Larry Russell); ECF No. 2455 (VNA’s motion to exclude opinions and testimony of Dr. Clifford P. Weisel); ECF No. 2456 VNA’s motion to exclude testimony and reports of Robert A. Michaels); ECF No. 2458 (VNA’s motion to exclude opinions and testimony of Dr. David Keiser); ECF No. 2459 (VNA’s motion to exclude opinions and testimony of Dr. Daryn Reichert); ECF No. 2460 (VNA’s motion to exclude opinions and testimony of Dr. Paolo Gardoni); ECF No. 2461 (VNA’s motion to exclude opinions and testimony of Dr. Howard Hu); and ECF No. 2483 VNA’s motion to exclude opinions and testimony of Dr. Panagiotis (Panos) G. Georgopoulos).

February 13, 2024. (ECF No. 2435.) Defendants argue that these experts cannot meet the standards set by Federal Rule of Evidence 702 and *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579 (1993).

Currently before the Court is the motion by Veolia North America, LLC, Veolia North America, Inc., and Veolia Water North America Operating Services, LLC (collectively “VNA”) to exclude certain testimony and opinions of Dr. David Keiser. (ECF No. 2458.) On September 13, 2023, a hearing was held and argument was heard. For the reasons set forth below, VNA’s motion is denied.

## **I. Background**

Dr. David Keiser is an expert in environmental and natural resource economics. (ECF No. 1177-114, PageID.31360.) Dr. Keiser, who teaches at the University of Massachusetts Amherst, has a Ph.D. in Environmental and Natural Resource Economics from Yale University, an M.S. in Agricultural and Applied Economics from the University of Georgia, and a B.A. in Mathematics and Religious Studies from the University of Virginia. (*Id.*) Dr. Keiser studies surface water and drinking water quality and has published his work widely in economics journals. (*Id.*)

Plaintiffs initially retained Dr. Keiser to provide “an overview of economic damages due to the contamination of the drinking water supply in Flint, Michigan.” (*Id.* at PageID.31294.) His opinions here are largely based on his co-authored work, “Economic Effects of Environmental Crises: Evidence from Flint, Michigan,” which was published in the *American Economic Journal: Economic Policy*. (ECF No. 2508, PageID.83100.) His research “(1) [explains] how to construct an economic model to determine whether residential-property owners in Flint suffered losses, if any, caused by the Flint Water Crisis, and (2) [uses] that model to quantify the harm those property owners suffered, if any, caused by the Flint Water Crisis.” (*Id.*) In addition to other reports, Dr. Keiser provided a Supplemental Expert Report on October 18, 2022, which contends that his “methodologies are capable of demonstrating that the mismanagement of the water supply in Flint caused harm to Flint residents and property owners.” (ECF No. 2458-3, PageID.79057.)

On May 19, 2023, VNA filed this motion to exclude Dr. Keiser’s opinions that quantify the magnitude of total loss of property value across the class. (ECF No. 2458.)

## II. Legal Standard

Federal Rule of Evidence 702 governs the admissibility of expert testimony and requires that: (1) the witness must be qualified, (2) the testimony must be relevant, and (3) the testimony must be reliable. Fed. R. Evid. 702; *In re Scrap Metal Antitrust Litig.*, 527 F.3d 517, 528–29 (6th Cir. 2008). Under Rule 702, relevance consists in “assist[ing] the trier of fact to understand the evidence or to determine a fact in issue.” *Daubert*, 509 U.S. at 591 (quoting and interpreting Fed. R. Evid. 702). In assessing expert testimony, courts “should also be mindful of other applicable rules.” *Id.* at 591. Under Rule 403, courts “may exclude relevant evidence if its probative value is substantially outweighed by a danger of one or more of the following: unfair prejudice, confusing the issues, misleading the jury, undue delay, [or] wasting time.” Fed. R. Evid. 403. As the Supreme Court explained in *Daubert*, Rule 702 imposes a “gatekeeping” obligation on the courts to ensure that scientific testimony “is not only relevant, but reliable.” *Daubert*, 509 U.S. at 589; *see also Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 147 (1999).

“Rejection of expert testimony is the exception, rather than the rule.” *United States v. LaVictor*, 848 F.3d 428, 442 (6th Cir. 2017)

(quoting *In re Scrap Metal*, 527 F.3d at 529–30)). But the burden is on Plaintiffs to show by a “preponderance of proof” that the proffered expert meets the standards of Rule 702 as interpreted by *Daubert*. *Pride v. BIC Corp.*, 218 F.3d 566, 578 (6th Cir. 2000) (quoting *Daubert*, 509 U.S. at 592).

### III. Analysis

VNA argues that Dr. Keiser’s testimony quantifying the magnitude of total loss of property value across the class should be excluded. (ECF No. 2458, PageID.79042.) VNA urges the Court to exclude his testimony about declines in home prices using specific percentages or dollar figures, but VNA does not argue for excluding his testimony that there was a “statistically significant decline in home prices.” (ECF No. 2528, PageID.83865–83866.)

First, VNA argues that his testimony should be excluded as irrelevant. (ECF No. 2458, PageID.79046.) Second, VNA argues that, under Rule 403, his testimony should be excluded because its inclusion would waste time, confuse the issues, mislead the jury, and create unfair prejudice. (*Id.* at PageID.79047.) Plaintiffs argue, among other things, that VNA’s motion is “not a proper *Daubert* challenge” and should be

denied on that basis as premature. (ECF No. 2508, PageID.83103–83104.)

#### **A. Propriety and Timeliness of VNA’s Motion**

Plaintiffs challenge VNA’s motion, which focuses on relevance and issues related to Rule 403, as improperly brought and premature. (ECF No. 2508, PageID.83103.) Because VNA does not challenge Dr. Keiser’s opinions or methodology as unreliable, Plaintiffs argue that VNA’s motion does not deal with *Daubert*’s primary goal of excluding junk science and is better addressed as a motion *in limine*. (*Id.* at PageID.83104.) Plaintiffs are incorrect for two reasons.

First, relevance is explicitly part of Rule 702 and *Daubert*. The *Daubert* Court explained that Rule 702 deals with “the evidentiary relevance and reliability” of expert testimony. *Daubert*, 509 U.S. at 595. Rule 702 incorporates relevance by requiring that “the expert’s scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue.” Fed. R. Evid. 702. As a result, raising concerns about relevance is appropriate in a *Daubert* motion.

Second, *Daubert* explicitly notes that “a judge assessing a proffer of expert scientific testimony under Rule 702 should also be mindful of other applicable rules.” *Daubert*, 509 U.S. at 595. In making this comment, the Supreme Court specifically references the pertinence of Rule 403 in assessing experts. *Id.* As a result, the Court is not precluded from considering VNA’s arguments about Rule 403 here and, in fact, has inherent authority to manage trials, which includes the choice about when to rule on motions to exclude experts. *VBS Distrib., Inc. v. Nutrivita Lab’ys, Inc.*, Case No. SACV 16-01553, 2018 WL 9946319, at \*4 (C.D. Cal. May 7, 2018) (citing *Luce v. United States*, 469 U.S. 38, 41 n.4 (1984)). Also, as set forth during the oral argument, the Court anticipates extensive *in limine* motion practice and prefers to address this issue now and not on the eve of trial. Accordingly, it is not premature to consider this motion, even if it is not focused on Dr. Keiser’s reliability.

### **B. Relevance of Dr. Keiser’s Testimony Estimating the Magnitude of Lost Property Values**

VNA first challenges the relevance of Keiser’s testimony estimating the magnitude of lost property values due to water contamination. Dr. Keiser’s research, which deals with a sample of homes that sold for between \$25,000 and \$10 million in Flint, finds that after the switch to

Flint River water, home prices declined 38.5%. (ECF No. 2458-3, PageID.79078, 79088.) Finding an average decline of about \$27,400 to \$29,400, he estimates the total housing market losses to be \$520 to \$559 million in Flint. (*Id.* at PageID.79067.) He finds the impact of the water contamination to be statistically significant. (ECF No. 2508-15, PageID.83258.)

VNA argues that Dr. Keiser's percentage and dollar estimates are irrelevant to Plaintiffs' contention that contaminated water conditions could cause diminished property values in Flint. (ECF No. 2458, PageID.79043.) Under Rule 702, expert testimony must be relevant, meaning it will "help the trier of fact to understand the evidence or to determine a fact in issue." Fed. R. Evid. 702. In order to be relevant to the Plaintiffs' arguments about causation, VNA notes that Dr. Keiser's testimony may not be offered to prove damages, which are irrelevant to the causation question about water contamination presented in the Issues Class. (ECF No. 2458, PageID.79046.) VNA contends that measurements of the magnitude of loss relate to class-wide damages and will not help the trier of fact determine causation, because the relevant

point is whether water contamination caused a statistically significant loss. (ECF No. 2528, PageID.83865.)

The magnitude of damage is relevant insofar as it provides context for Dr. Keiser's claims, however. His model compares home prices in Flint and "control cities" in order to test for a divergence in price due to water contamination. (ECF No. 2458-3, PageID.79066–79067.) Rule 702 indicates that one way to assist the trier of fact is to help them understand the evidence being offered. Fed. R. Evid. 702. Here, the estimated magnitude of loss is the basis for Dr. Keiser's opinions. (ECF No. 2508, PageID.83106.) Specifically, Dr. Keiser's methodology involved making estimations in percentage and dollar terms. (*E.g.*, ECF No. 2458-3, PageID.79066–79067.) Presenting that information to a factfinder will assist them in understanding how Dr. Keiser reached his conclusions about whether the water contamination could cause harm to Flint properties. Fed. R. Evid. 702; (ECF No. 2250, PageID.73961.) Accordingly, his estimations are relevant and should not be excluded under Rule 702.

### **C. Rule 403 and Dr. Keiser's Testimony Estimating the Magnitude of Lost Property Values**

VNA also argues that the testimony from Dr. Keiser at issue should be excluded under Rule 403. (ECF No. 2458, PageID.79047.) VNA argues that his testimony's "probative value is substantially outweighed by a danger of . . . unfair prejudice, confusing the issues, misleading the jury, undue delay, [and] wasting time." Fed. R. Evid. 403.

#### *i. Wasting Time*

Relying on 403, VNA first argues that this testimony would be a waste of time. (ECF No. 2458, PageID.79047.) VNA argues the testimony would be a waste of time by attacking Dr. Keiser's methodological assumptions, noting the time it would take to cross examine him on these assumptions at trial and present contradictory expert evidence on the subject. (*Id.* at PageID.79048.) VNA specifically raises concerns about which homes were included in his data sample. (*Id.* at PageID.79047 n.2.) This critique seems to speak mainly to reliability, despite VNA's argument here being about the time it would take to refute Dr. Keiser. (*Id.* at PageID.79048.) Moreover, VNA does not support its claim that it would take a "significant amount of time" to properly respond, nor does VNA explain why it would take any less time to respond to Dr. Keiser's

claim that there was a statistically significant home price decline—a claim VNA does not seek to exclude as a waste of time. (*Id.*) It is unclear why specific estimates about magnitude of loss raise concerns about wasted time, then.

*ii. Misleading and Confusing the Factfinder*

VNA also suggests the testimony will mislead and confuse the jury, because the time period for Dr. Keiser’s study exceeds the class period in this case. (ECF No. 2458, PageID.79048.) It is unclear what is confusing or misleading about the research not perfectly tracking the time period at issue in the trial, insofar as the issue here is whether the water contamination can cause harm to Flint residents. (ECF No. 2508, PageID.83100–83101.) Keiser looks at the period from April 2014 to September 2015, and then housing market data through August 2019. (ECF No. 2458-3, PageID.79065–79066.) The Class period is February 10, 2015 to October 16, 2015 (ECF No. 1957, PageID.68127.) Even if there is not perfect overlap, showing that water contamination is able to cause harm in the period examined in Dr. Keiser’s research suggests such contamination can also cause harm in the period at issue here. If there is indeed some limitation in the value of Dr. Keiser’s discussion due to the

time period considered in his research, VNA can cross-examine him about that. Insofar as there is any potential for confusion, which is not evident from VNA's brief discussion of this issue, it does not "substantially" outweigh the probative value of this testimony. Fed. R. Evid. 403.

*iii. Causing Unfair Prejudice*

Next, VNA argues that this testimony will cause unfair prejudice and should therefore be excluded under Rule 403. The Court must weigh the probative value of evidence against its "potential prejudicial impact." *United States v. Layne*, 192 F.3d 556, 573 (6th Cir. 1999). As set forth previously, Dr. Keiser's estimates have probative value insofar as they illuminate his methodology and contextualize his opinions.

The question, then, is whether this testimony causes unfair prejudice that substantially outweighs its probative value. Fed. R. Evid. 403. Unfair prejudice arises when evidence has the capacity to "lure the factfinder" into making a decision for the wrong reasons. *See Old Chief v. United States*, 519 U.S. 172, 180 (1997). VNA argues that the "large numbers" Dr. Keiser will mention are not necessary when all the jury is being asked to do is to answer a "yes or no question." (ECF No. 2458, PageID.79048–79049.) VNA suggests it is "a matter of common sense"

that “enormous figures” will prejudice the jury against VNA. (ECF No. 2528, PageID.83866.) They note that the jury is not being called upon to award damages. (*Id.*)

None of these arguments succeed. Insofar as VNA is arguing the testimony is irrelevant, the Court has already set forth its reasons for rejecting those claims. Insofar as VNA is objecting that the factfinder will hear large numbers related to damages and think they must award damages, the jury instructions and verdict form will serve to clarify that no such question is at issue here. As VNA points out, the jury will be answering a yes or no question about causation. (ECF No. 2458, PageID.79048.) Moreover, there is nothing “unfairly ugly” that makes the testimony likely to encourage improper inferences by the factfinder. *United States v. Adams*, 722 F.3d 788, 812 (6th Cir. 2013). Dr. Keiser’s estimations are part of his methodology that addresses causation, and the fact that the numbers involved in reaching his conclusions are large does not mean they are unfair. VNA cites no caselaw suggesting otherwise. Accordingly, Rule 403 does not provide a basis for excluding Dr. Keiser’s testimony.

#### **IV. Conclusion**

For the reasons set forth above, VNA's motion to exclude certain of Dr. Keiser's opinions and testimony is denied.

IT IS SO ORDERED.

Dated: September 15, 2023  
Ann Arbor, Michigan

s/Judith E. Levy  
JUDITH E. LEVY  
United States District Judge

**CERTIFICATE OF SERVICE**

The undersigned certifies that the foregoing document was served upon counsel of record and any unrepresented parties via the Court's ECF System to their respective email or first-class U.S. mail addresses disclosed on the Notice of Electronic Filing on September 15, 2023.

s/William Barkholz  
WILLIAM BARKHOLZ  
Case Manager